Financial Factors Influencing Pricing Of Residential Houses In Nakuru East Sub-County, Kenya

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Abstract: The real estate market plays important role in economy. The Kenyan real estate market has been experiencing a boom in the past ten years and the latest findings have shown that the trend will continue into the foreseeable future. The study sought to investigate the financial factors influencing pricing of residential houses in Nakuru East sub-County, Kenya. The study sought to examine the influence of cost of land, interest rates and mortgage risk on pricing of residential houses. The target population was 60 managers of real estate companies and agents in Nakuru. Data collection was done through use of questionnaires constructed on five point likert scale. Collected data was analyzed using statistical package for social sciences. Data was analyzed using descriptive statistics and inferential statistics and presented in tables and figures. The study concluded that mortgage risk significantly influenced the pricing of residential houses in this area. The study recommended that better mortgage arrangements should be provided that enables potential homeowners to afford facilities with lower mortgage risk implication. This will enhance the ability of people to own homes thus bringing down rental prices.

Keywords : Cost of Land, Government Policy, Interest Rates, Mortgage Risk and Pricing.

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I. INTRODUCTION

Real estate industry is the leading indicator of development in any economy and is used to measure the economic growth and health of a country. It entails creation of permanent immovable assets, involves capital and labour intensive activities thus used as a vehicle for economic development since there is job creation. Demand for real estate is triggered by economic and population growth thus real estate participants construct houses to meet the demand and on return get cash flow from these investments. As the cycle continues, there is oversupply thus creation of trade off between supply and demand (Carey, 2001). Studies have shown that half of the world's population live in urban centres and one third of them in slums. This figure is expected to increase by one billion in a decade and slums will grow at an accelerated pace unless 35million housing units are made available annually (UN-Habitat, 2002). Virtually all this growth takes place in developing countries.

A report by Goldman Sachs (2007) analyzed factors that led to the global housing boom. The report cited several facts to support the importance of fundamentals. First, the report found a strong positive correlation between income growth and house price appreciation across countries. Second, house price appreciation was also strongly correlated with population growth. Finally, countries with the biggest reduction in real interest rates also had the highest rates of house price appreciation.

Globally real estate prices have been on an upward trend; like in the UK prices have been rising, but buying property remains 13 per cent more cost-effective than renting (Zoopla, 2012;KFPGRI, 2012). In the UK, the market for property derivatives did not begin until 2004. However, since the market's inception, the growth has been significant. Through the third quarter of 2007, trades with an outstanding notional value of 7.9 billion pounds have been executed. Renting in the UK was previously £993 per year on average more expensive than servicing a mortgage, but this gap has now come down by 3.2 per cent to £961 today. As a result, the proportion of towns and cities across the UK where it is cheaper to buy than rent has fallen from 90per cent to 86per cent over the past few years (Zoopla, 2012).

According to World Bank report (2010) Kenya is one of the most rapidly urbanizing nations among the developing countries. It is estimates that about 200,000 Kenyans move to cities every year and that formerly rural areas are increasingly becoming urban. Despite this, the national and local governments have failed to provide basic urban services like infrastructure and affordable housing, thus allowing the private sector to take over (Kenya's vision 2030). Unfortunately, the profit-motivated sector largely provides housing for the upper-

middle and upper-income households, thus leading to proliferation of slums and other informal settlements that cater for poor dwellers (UN-Habitat report, 2011).

Nakuru is Kenya's third largest residential town after Nairobi and Mombasa and was rated the fastest developing town in sub-Saharan Africa in 2011 by the UN habitat. Prices for commercial space have more than doubled in the last four years with office space costing up to Sh90 per square foot from about Sh30 in 2008. The high demand has been triggered by large corporate institutions such as banks, supermarkets, universities and colleges in town which normally require huge space.

According to first county integrated plan (2013-2017) the total population of Nakuru County stood at 1,867,461 in year 2014, comprising of 937,131 males and 930,330 Females as per the projections of Kenya National Population and Housing Census of 2009. The population is projected to increase to 1,925,296, comprising of 966,154 males and 959,142 Female in 2015 and to 2,046,395 comprising of 1,026,924 males and 1,019,471 females at the end of the plan period. This remarkable growth in the population implies that the county will have to invest in more social and physical infrastructure to match the needs of the growing population. Among physical infrastructure constraining the county is residential houses. The county has a housing demand of 10,000 units per year but only 2,000 units are available annually. The governor of Nakuru County noted that some few years ago (5 years), the price of a three bed roomed house was Kshs3000 while currently the prices have more than tripled (Daily Nation, DN2 Magazine, 2014). This study will be seeking to examine the economic factors influencing the pricing of residential houses in Nakuru East Sub-County.

Murungi (2014) indicates that prices of real estate can be affected by factors such as property location, neighbourhood, the level of accessibility and distance or proximity to facilities. Real estate prices can also be determined by the level of technology available, level of demand and supply, the existing economy of a country, employment level and accessibility of finance by both investors and buyers (Chiller, 2005).

Miller (2010) argues that increased property prices reduce the marketability of real estate because few peoples will be willing and able to acquire property. A change in real estate price is also said to have a direct effect on wealth of households because it contributes to increased or reduction in returns on property investment to the investors. Increased prices of residential buildings have contributed to development of new slums and expansion of the existing slums (Mutisya et.al, 2011). Chiller (2005) holds the view that an increase in existing prices of real estate leads to increase in money spent on rents and purchases hence reducing savings by households.

The increasing population and rural to urban migration in Kenya can be termed as the major cause of rise in prices of the residential houses in most urban areas. The Kenyan population is anticipated to increase to about 73 million people by the year 2030 and more than 60% of these peoples are expected to be living in urban areas hence creating a huge demand for residential housing units (GOK, 2007). The quantity of residential 3 houses needed has risen from 150,000 units every year to 200,000 units per year, with only 35,000 units produced, of which only 20 per cent is targeted at the low-income group (GOK, 2007). Kenya's construction sector recorded a growth of 8.3 percent in 2008 compared to 6.9 percent in 2007 (GOK, 2009). This increasing investment in the residential houses is expected to solve the escalating prices of the residential houses as it will increase the supply in the economy hence reducing the prices.

Over the last few years, a large number of Kenyans have been in a rush to own property which has contributed highly to a major boom in the residential property market (Korir, 2009). Majtenyi (2010) argues that increase in demand for residential property in Kenya has resulted to doubling and even to an extent of tripling of residential property prices in the past few years. Zhu (2004) showed the strong and long-lasting link between inflation and housing price. During inflation, most things in the economy will increase their price. However, the cost of the raw material for building a house will increase.

Interest rates acquired through bank lending may affect the housing price through various liquidity effects. The housing price is just like the price of any asset. It can be determined by the discounted expected future stream of cash flows. If the financial banks increase the availability of credit, it means that the bank will provide lower lending rates and encourage current and future economic activity. Basically, the better availability of credit will cause the demand for housing to increase when the households are borrowing (Barakova et.al, 2003). The growth in demand will then be reflected in higher housing prices.

II. REAL ESTATES' MARKETS IN NAKURU

Roack consult limited (2013) research for an individual to own a house whether rental or outright ownership he or she should have a stable source of income. The assumption is for one to have a stable income is for one to be a salaried individual. It also noted a finding from the Economic Survey 2012; Nairobi had 538,600 persons in formal wage employment by 2011 up from 479,300 reported in 2007. The wage employment expansion was 12.5% in a period of four years and at an average of 3.4% annually. It is projected that wage employment in Nairobi will grow by 5% in 2013/2014, bringing the total number of wage employment to 565,500 persons. Assuming that most of those in the wage employment were couples, the demand for housing in

Nairobi is 282,750 units. Such statistics are quite staggering as from the official government records released in 2007 it is estimated that 35,000 units are completed annually. Clearly there is a huge gap of over 200,000 units which hence creates an investment opportunity for property developers.

According to Quantity Surveyor's report (2013) Suraya properties has tried to develop different properties which target different people in the market and tried incorporating the need to avail affordable housing. They have built different properties in different locations across Nairobi and its environs targeting different class of people such as gated communities like Rosslyn heights built along red hill road targeting the high end clients while the Lynx projects along Mbagathi road and Mombasa road targeting the middle income earners. According to the Co-founder of Suraya property developers Susan Muraya the houses built vary as they target young upward people from first time home buyers who are looking for homes in already developed areas although they main focus is on salaried individuals. They also have allowed the ability for one to trade the homes that they initially owned as they advance in life.

Hassanali (2013) stated that low-cost housing projects remain to be an eternal gap in the market as the potential demand is huge. However, due to the absence of good infrastructure in many parts, the costs and therefore sale prices of these projects are such that the homes are not really affordable for the target market hence the focus on luxury up market projects which are rising fast in quality as the market is getting more discerning. This is a good trend and bodes well for the future. Kenya is the most developed country in the east Africa region and the middle class is growing fast, creating opportunities for housing. Business tourism has increased significantly in Kenya, creating the need for more accommodation facilities. There is a need for investment in affordable hotel accommodation facilities that are up to par with international standards (Ojijo, 2013).

III. STATEMENT OF THE PROBLEM

In recent years, the population and the rate of rural to urban migration have been on an upward trend and this has highly increased the population of Nakuru town. It should be noted that all these people need shelter as one of the basic commodities, thus causing the housing sector to boom and contribute to growth of the economy (Nuri & Frank, 2002). Real estate market is one that is characterized by almost predictable cycles of booms and busts (Smith, 2010). The former are the periods when the prices in market soar and almost inevitably, they are followed by other periods when the prices plummet.

There are actually people who make a living out of these cycles. These are people whose study of the real estate property markets has brought them to a point where they can reliably tell when they are seeing a bust (when prices are very low), purchase property at that point and then sell it during the subsequent and virtually inevitable boom, making a big profit (Smith, 2010). The construction sector in Kenya recorded a growth of 8.3 per cent in 2008 compared to 6.9 per cent in 2007 (Republic of Kenya, 2009). The robust growth was supported largely by increased capital investment in roads and housing. Increase in construction activities was reflected in cement consumption which grew by 7.0 per cent from 2.061.4 thousand tones in 2007 to 2.205.8 thousand tones in 2008 (Republic of Kenva, 2009). Otieno (2012) explains that despite the high competition in the market, the large economy supports real estate investment. When the yields of residential properties are low, their prices are high. This means that the cost of buying a house is high compared to the cost of renting a house which force many potential buyers to prefer to be renters instead of being buyers thus reducing sale prices of residential property. The state of increased population from rural to urban migration and also the settlement of Internally Displaced Persons (IDPs) in Nakuru town can lead to the changes in pricing of residential houses in the town. Few studies have been done addressing factors influencing the pricing of residential houses in Kenya and more so in Nakuru county. Therefore, this study sought to seek financial factors influencing the pricing of residential houses in Nakuru town Kenya.

IV. OBJECTIVES OF THE STUDY

The study sought to examine the financial factors influencing pricing of residential houses in Nakuru town East Sub-County, Kenya. Specifically the study sought to examine the influence of mortgage risk on pricing of residential houses

V. HYPOTHESIS OF THE STUDY

 H_0 : Mortgage risks had no significant influence on pricing of residential houses in Nakuru Town East Subcounty, Kenya.



Dependent Variable

VII. **THEORETICAL REVIEW**

7.1 Hedonic Model of Pricing theory

This theory was formulated by Lancaster's (1966) in his seminal paper which was the first attempt to create a theoretical foundation for hedonic modeling. The theory argued that it is not necessarily a good itself that creates utility, but instead the individual "characteristics" of a good that create utility. Specifically, an item's utility is simply the aggregated utility of the individual utility of each of its characteristics. Furthermore, it argued that items can be arranged into groups based on the characteristics they contain. Consumers make their purchasing decisions within a group based on the number of characteristics a good possesses per unit cost.

Although Lancaster was the first to discuss hedonic utility, he said nothing about pricing or pricing models. Rosen (1974) was the first to present a theory of hedonic pricing. Rosen argues that an item can be valued as the sum of its utility generating characteristics; that is, an item's total price should be the sum of the individual prices of its characteristics. This implies that an item's price can be regressed on the characteristics to determine the way in which each characteristic uniquely contributes to the price. Although Rosen did not formally present a functional form for the hedonic pricing function, his model clearly implied a nonlinear pricing structure.

The application of the hedonic price model to the housing market rests on several key assumptions. First, homogeneity of the housing product is assumed. Another assumption is that the market operates under perfect competition, and there are numerous buyers and sellers with free entry and exit. The model also assumes that buyers and sellers have perfect information concerning housing product and price. Finally, the hedonic price model only works under the assumption of market equilibrium, and that there are no interrelationships between the implicit prices of attributes (Rosen, 1974).

A major issue frequently associated with the hedonic price model is the misspecification of variables where an irrelevant independent variable is included (over-specification), or where a relevant independent variable (attribute of a product) is omitted (under specification). This can lead to biased and inconsistent coefficients (Rosen, 1974). The main advantage of this model is that one only needs to have certain information, such as the property price, the composition of housing attributes, and a proper specification of the functional relationships. The marginal attribute prices are obtained by estimating the parameters of the hedonic price function. It is a straightforward approach because only the coefficients of the estimated hedonic regression are needed to indicate the preference structure. No information whatsoever about individual characteristics or personal particulars of either the house buyers or the supplier is required (Rosen, 1974). The theory will be significant in this study in establishing the role of financial factors in determining the pricing of residential houses.

VIII. MORTGAGE RISK AND PRICING OF RESIDENTIAL HOUSES

Financing of real estate has unique characteristics of monthly repayment, long maturity and constant increase in prices of properties. Due to these characteristics, the prices of houses keep on increasing which eventually leads to decreased affordability by potential home owners. Murungi (2014) on his study on the factors causing price changes of residential houses in Nairobi over the period 2008-2012 found that ease of access to and availability of mortgages has contributed to increased prices of residential houses in Nairobi County over the last four years. Murungi observed that 97% of the respondents stated that the interest rate charged on mortgages had effect on property price. They responded that higher interest rate contributes to higher charges on mortgage acquired. This increases the amount of money spent by property developers who use mortgages to finance property which leads to increased prices of property. Bad lending practice is one of the causes of real estate bubble. This happens when loans or mortgages are given to real estate consumers who should not or do not meet the minimum set qualifications (Hardaway, 2011). Due to the fact that the peoples awarded these loans did not have down payments, reserved funds and good income, thus making the loans carry

low interest rates. This increases the level of demand for real estate property which leads to high prices of the available properties.

Muli (2011) studied the relationship between property prices and mortgage lending in Kenya. The research was inspired by the fact that swings in the property prices have been extremely large in the recent years. This research employed a quarterly database from 2006 to 2010. A dynamic economic model was employed to assess the relationship between housing prices and credit using multiple regressions. The study concluded that changes in housing prices are positively and significantly related to the long term evolution of mortgage credit. This result suggests that the evolution of housing prices is not triggered by bank real estate lending and that banks just accommodate real estate financing to the evolution of house prices. Muli (2011) showed that the changes in housing price are positively and significantly related to the long-term evolution of mortgage credit. Most house purchases are financed by credit thus affecting prices through liquidity effects. Ndinda (2014) did a study to assess the effect of mortgage financing on performance of real estate market in Kenya. The study revealed that positive relationship exists between mortgage financing and performance of real estate market in Kenya. Home owners invest in real estate property in anticipation of future increase in prices and rental income

IX. PRICING OF RESIDENTIAL HOUSE

Property prices depend on market characteristics such as vacancy level, land availability, construction supply elasticity to respond to high or low speed to changes on the demand, as well as potential for economic growth, industrial and services activities located inside urban areas, etc. (Taltavull, 2003). Brueggeman and Fisher (2008) argue that an important concept in real estate analysis is the fact that the house prices are highly dependent on the region or geographic area in which they are located. They further state that demand for properties in local markets is highly influenced by the nature of the industries, businesses, and so on, that are attracted to a region.

Ahuja (2009) identified three factors that influence the general price levels namely the volume of trade or transactions, the quantity of money and the velocity of circulation of money. According to the Fisher's transaction approach, the price levels raise proportionately with a given increase in the quantity of money other things remaining constant. However, the Keynesian theory places emphasis on the aggregate demand or expenditure relative to aggregate supply rather than just the quantity of money (Ahuja, 2009).

Jobber and Lancaster (2006) provided five constraints to a seller's capacity to set prices namely the objectives of the seller such as return, the level of demand, marketing objectives such as market penetration, cost considerations and competitor considerations. Factors affecting property price include population growth, employment, household income, interest rates and cost of renting a house (Brueggeman & Fisher, 2008) while Odame, Key and Stevenson (2010) found out that real estate characteristics such as location, landscaping quality, gross internal areas and plot size predominated in the explanation of transactions price. Other factors would include infrastructure development, the perceived security of the area and availability of amenities.

Murangi (2013) indicates that prices of real estate can be affected by factors such as property location, neighbourhood, the level of accessibility and distance or proximity to facilities. Real estate prices can also be determined by the level of technology available, level of demand and supply, the existing economy of a country, employment level and accessibility of finance by both investors and buyers (Chiller, 2005). Miller (2010) argues that increased property prices reduce the marketability of real estate because few peoples will be willing and able to acquire property. A change in real estate price is also said to have a direct effect on wealth of households because it contributes to increased or reduction in returns on property investment to the investors. Increased prices of residential buildings have contributed to development of new slums and expansion of the existing slums (Mutisya et.al, 2011). Chiller (2005) holds the view that an increase in existing prices of real estate leads to increase hence reducing savings by households.

Kariuki (2012) explains that since the year 2002 Kenyan real estate sector has been experiencing a boom, hence confusing many buyers in the region. While other property markets in the world sank, the Kenyan situation remained strong. The latest findings by the research groups such as Knight Frank and Citi Private Wealth seem to anticipate better times ahead. Kenya's high economic growth and a dynamic business regime are some of the reasons being given for this drive (Julie, 2012). As the other top world cities are experiencing low prices on residential property, Kenya seems to be faced by very high prices on residential property thus attracting a lot of international investors (Kariuki, 2012).

X. RESEARCH METHODOLOGY

The study employed explanatory research design. According to Burns and Grove (2003), the purpose of research design is to achieve greater control of the study and to improve the validity of the study by examining the research problem. The target population of the study was 60 real estate companies and agents in Nakuru. As such, the total target population of the study was 60 real estate companies and agents in Nakuru. The researcher adopted a census where all the 60 managers in the in real estate agencies and companies were

taken as the study's respondents. The study used structured questionnaire that was distributed to the managers in the real estate companies and agencies. According to Kothari (2006), a questionnaire is the best tool for the researcher who wishes to acquire the original data for describing a population. The questionnaire was composed of short structured closed ended statements constructed on 5 point Likert scale. Data collected was processed and analyzed based on the objectives and research hypotheses using Statistical Package for Social Sciences (SPSS). This was done using both descriptive and inferential statistics. Descriptive statistics (percentages, frequencies, and means) presented in tables was used to organize and summarize data and to describe the characteristics of the sample while Pearson correlation coefficient was used to check the relationship between variables. ANOVA was used to test the influence of the independent variables on the dependent variable and the study hypothesis at p<.05 level of significance.

XI. FINDINGS AND ANALYSIS

A total of 60 questionnaires were distributed to the respondents for the purposes of data collection.54 questionnaires were correctly filled and were deemed appropriate for data analysis after the sorting process

XII. MORTGAGE RISK

In regard to the mortgage risk, the findings from the analysis were as presented in table 4.5 below.

	SA	А	U	D	SD	χ2	p-
	(%)	(%)	(%)	(%)	(%)		value
To avoid mortgage risk most of the	31.5	63.0	3.7	1.9	0	53.407 ^a	.000
people in this area rely on their	(17)	(34)	(2)	(1)			
savings to buy housing properties							
Government employed people in this	27.8	63.0	3.7	5.6	0	49.259 ^a	.000
area easily acquire properties through	(15)	(34)	(2)	(3)			
mortgage financing arrangements							
with the employer							
Mortgage rates are high discouraging	38.9	55.6	5.6	0	0	21.000 ^b	.000
people from buying properties in this	(21)	(30)	(3)				
area							
The long maturity periods for	16.7	64.8	14.8	1.9	1.9	73.037 [°]	.000
mortgage financing makes buying	(9)	(35)	(8)	(1)	(1)		
land a costly affair							
The qualifications for mortgage are	31.5	63.0	5.6	0	0	26.778 ^b	.000
high for people to afford	(17)	(34)	(5.6)				
The banks have attractive financing	42.6	53.7	0	3.7	0	22.333 ^b	.000
packages for home owners in this	(23)	(29)		(2)			
locality making it easy to access							
construction capital							
Valid N (listwise)	54						

Table 4. 1: Descriptive Statistics of	on Mortgage Risk
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The table indicated that 94.5 % of the respondents strongly and/or that in order to avoid mortgage risk most of the people in the area rely on their savings to buy housing properties. Further 90.8% of the respondents strongly and/or agreed that the government employed people in the area easily acquire properties through mortgage financing arrangements with the employer. On the other hand 94.5% of the respondents strongly and/or agreed that mortgage rates are high discouraging people from buying properties in this area. Additionally, 81.5% of the respondents noted that the long maturity periods for mortgage financing makes buying land a costly affair and that the qualifications for mortgage are high for people to afford. In contrast, 96.3% of the respondents strongly and/or agreed that the banks have attractive financing packages for home owners in this locality making it easy to access construction capital. All the chi-square (χ 2) values were significant at p<.05 meaning that the respondents had significantly diverse views in regard to all the aspects.

XIII. PRICING OF RESIDENTIAL HOUSES

The findings in relation to the respondents views regarding the pricing of residential houses were as presented in table 4.7 below

Table 4. 2: Descriptive Statistics on Pricing of Residential Houses							
	SA	А	U	D	SD	χ2	p-
							value
Rising demand in housing has led to sky		42.6	0	1.9	0	25.444 ^a	.000
rocketing of house prices		(23)		(1)			
Increase in money spent on rent has led to	55.6	38.9	1.9	3.7	0	45.704 ^b	.000
decrease in people savings making it		(21)	(1)	(2)			
difficult for them to own homes							
The imbalance between the supply and	51.9	44.4	3.7	0	0	21.778 ^a	.000
demand has caused an increase in the	(28)	(24)	(2)				
prices of houses							
To regulate the problem of over valuation,	50.0	42.6	3.7	3.7	0	39.778 ^b	.000
the government avails information on the	(27)	(23)	(2)	(2)			
pricing of residential houses							
Increased income levels in this locality	33.3	63,0	0	1.9	1.9	55.778 ^b	.000
has led to increased house prices	(18)	(34)		(1)	(1)		
The high cost of capital has led to an	50.0	44.4	1.9	3.7	0	43.037 ^b	000
increase in the housing prices	(27)	(24)	(1)	(2)			
Valid N (listwise)	54						

The table indicated that 98.2% of the respondents strongly and/or agreed that the rising demand in housing has led to sky rocketing of house prices. Further 94.5% of the respondent strongly and/or agreed that increase in money spent on rent has led to a decrease in peoples savings making it difficult for them to own. On the other hand, 96.3% of the respondents strongly and/or agreed that the imbalance between the supply and demand has caused an increase in the prices of houses. Additionally, 96.3% of the respondents strongly and/or agreed that to regulate the problem of over valuation, the government avails information on the pricing of residential houses. Further 96.3% of the respondents strongly and/or agreed that increased income levels in the locality has led to increased house prices. In addition 94.4% of the respondents strongly and/or agreed that the high cost of capital has led to an increase in the house pricing.

XIV. MORTGAGE RISK AND PRICING OF RESIDENTIAL HOUSES

Correlation analysis was further undertaken to examine the relationship between the mortgage rates and the pricing of residential houses. The findings from the analysis were as shown in table 4.10

Houses					
		Mortgage Risk	Pricing		
Mortgage Risk	Pearson Correlation	1	.427**		
	Sig. (2-tailed)		.001		
	N	54	54		
Pricing	Pearson Correlation	.427**	1		
	Sig. (2-tailed)	.001			
	N	54	54		
**. Correlation is significant at the 0.01 level (2-tailed).					

 Table 4. 3:Relationship between Mortgage Risk and Pricing of Residential

The analysis established an average positive significant (r=.427, p=.001) relationship between mortgage risk and the pricing of residential houses in Nakuru East Sub-county, Kenya. The researcher therefore observed that mortgage risk have an important role in determining the pricing of residential houses in this area. Therefore, a reduction in mortgage rates leads to consequent reduction in house prices in the area. Therefore to control the pricing of residential houses, better mortgage rates need to be enhanced

XV. CONCLUSION

The study concluded that mortgage risk significantly influenced the pricing of residential houses in this area. There was an average positive significant relationship between mortgage risk and the pricing of residential houses. Further, mortgage risk was shown to significantly influence the pricing of residential houses. As such, the researcher concluded that mortgage risk has a significant role in determining the pricing of residential houses in Nakuru East Sub-county. Further better mortgage arrangements should be provided that enables

potential homeowners to afford the facilities with lower mortgage risk implication. This will enhance the ability of people to own homes and thus bring down rental prices.

REFERENCES

- [1]. Carey, M. (2001). *Small Business Lending and the New Basel Capital* Accord, Presented at the Global Conference on Credit Scoring, Washington DC, April 3.
- [2]. UN-Habitat, (2002), Sustainable Urbanization: Achieving Agenda 21, Nairobi.
- [3]. Goldman, S. (2007). Money and Capital in Economic Development. Washington, DC:
- [4]. Zoopla, V. (2012). *Financial policies and economic growth: theory, evidence and country-specific experience from sub-Saharan Africa.* AERC Special Paper, African Economic Research Consortium.
- [5]. World Bank Report (2010). "Kenya's Informal Settlement"
- [6]. UN- Habitat Report, (2011). "Housing Challenges in Upcoming Countries"
- [7]. Murungi, R. (2014). An Investigative Study on the Factors Causing Price Changes of Residential Houses in Nairobi Over the Period 2008-2012. A Case Study Of Lavington. Unpublished Thesis, University of Nairobi, Kenya.
- [8]. Chiller ,P. (2005).*Theory for Real Estate Valuation: An Alternative Way to Teach Real Estate Price Estimation Methods*. Curtin University Department of Property studies.
- [9]. Miller, M. (2010): "Risk, Uncertainty, and Divergence of Opinion," *Journal of Finance*, 32(4), 1151–1168.
- [10]. Mutisya, E. & Yarime, M. (2011). Understanding the grassroots dynamics of slums in Nairobi. The dilemma of Kibera Informal settlements. *International Transaction Journal of Engineering Management* & Applied Sciences and technologies 2(2), 197-213.
- [11]. Government of Kenya (2007), Housing Sector Incentives and Market Re Engineering. Government Printer
- [12]. Government of Kenya (2009), *Kenya Population and Housing Census 2009*: Kenya National Bureau of Statistics, Government of Kenya (Gok), Nairobi.
- [13]. Zhu, H. (2004). *The importance of property markets for monetary policy and financial stability*. Basel, Switzerland, Bank for International Settlements.
- [14]. Barakova, I., Bostic, R., Bostic, W., Calem, S. & Wachter, M.(2003) Does credit quality for homeownership. *Journal of Housing Economics*. 12(4): 318-336.
- [15]. Roack Consult Limited. (2013). Residential Real Estate Investment Performance in Kenya: A Review of the Kenyan Middle-Income Residential Sub-Sector. Nairobi, Kenya.
- [16]. Hassanali, S. (2013). The Property Market in 2013 Annual Report. Nairobi, Kenya
- [17]. Ojijo, D. (2013). Factors affecting Real Estate in Kenya. Standard Newspaper, pp. 42.
- [18]. Nuri, S. & Frank, N. (2002). The Role of Affordable Mortgages in Improving, Living Standards and Stimulating Growth, *IMF Working Paper*, 5
- [19]. Smith, T. (2010). Pricing Strategy: Setting Price Levels, Managing Price Discounts and Establishing Price Structures. Cengage Learning
- [20]. Republic of Kenya. (2009). Types of buildings: Central bureau of statistics: Government printers: Nairobi
- [21]. Lancaster, J. (1966). A New Approach to Consumer Theory, Journal of Political Economy, 74, 132-15
- [22]. Rosen, S. (1974). Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition, *Journal of Political Economy*, 82(1) 35-55.
- [23]. Muli, J. (2011). The Relationship Between Property Prices and Mortgage Lending in Kenya. *Unpublished MBA Project*, University of Nairobi.
- [24]. Ndinda, K. (2014). *The Effect of Mortgage Financing on Performance of Real Estate Market in Kenya*. Unpublished Thesis, University of Nairobi, Kenya
- [25]. Taltavull P. (2003). Determinants of housing prices in Spanish cities. Journal of property Investment & Finance, 21(2), 109-135
- [26]. Brueggeman, W. & Fisher, J., (2008). Real estate finance and investment (13th Ed.). McGraw-Hill Irwin
- [27]. Ahuja, L. (2009). *Macroeconomics: Theory and Policy* (15th Edition). S. Chand & Company Ltd, New Delhi.
- [28]. Jobber, D., & Lancaster, G. (2006). Selling and sales management (7th Edition). Prentice Hall
- [29]. Odame W., Key T., & Stevenson S., (2010) Residential market development in sub-Saharan Africa. International Journal of Housing Markets and analysis, 3(4), 308-326
- [30]. Kariuki, C. (2012). The Factors Affecting Residential Property Values in Nairobi, Kenya. Montevideo, Uruguay, s.n.

- [31]. Burns, N. & Grove, K. (2003). Understanding nursing research. (3rd Ed). Philadelphia, PA. W. B. Saunders.
- [32]. Kothari, C. (2006). *Research methodology: methods & techniques.* (1st Ed.). Nairobi: New Age International Publishers

Winnie Chemirmir Financial Factors Influencing Pricing Of Residential Houses In Nakuru East Sub-County, Kenya." IOSR Journal Of Humanities And Social Science (IOSR-JHSS), vol. 22, no. 11, 2017, pp. 01-09.
